



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,142	12/19/2005	Ben Van Haegendoren	PF030103	9444
24498 7590 12/09/2009 Robert D. Shedd, Patent Operations THOMSON Licensing LLC P.O. Box 5312 Princeton, NJ 08543-5312				
EXAMINER				
LOHN, JOSHUA A				
ART UNIT		PAPER NUMBER		
2114				
MAIL DATE		DELIVERY MODE		
12/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/561,142

**Applicant(s)**

VAN HAEGENDOREN ET AL.

**Examiner**

JOSHUA A. LOHN

**Art Unit**

2114

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 9/10/2009 have been fully considered but they are not persuasive.

With respect to applicant's arguments, on pages 9 and 10, that the initial connection script and the download routine of Britt, Jr. fail to disclose the signal specifying a nature of said software start up failure, the examiner respectfully disagrees. The communication session of Britt, Jr. includes both the initial connection signal and the download request, and as such the communication session discloses the failure signal in the initiation of a communication for communication the failure download request information.

With respect to applicant's arguments, on page 10, that Britt, Jr. does not disclose any information specifying a nature of said start up failure, the examiner respectfully disagrees. The replacement software request is a result of startup failure, and therefore the requested files inherently disclose a nature of the failure.

With respect to applicant's arguments, on page 10, that the combination with Loison only discloses a well-known DHCP message, not a "software start up failure signal", the examiner respectfully disagrees. In Loison, DHCP is used to recover from boot failure (column 1, lines 16-22), therefore it is acting as a startup failure recovery signal for Loison.

With respect to applicant's arguments, on page 11, involving the lack of a broadcast message, the examiner respectfully disagrees. Loison clearly discloses the broadcast of a message when taken in combination with Britt, Jr.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-9, 11, 13, 14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Britt, Jr. Et al., United States Patent number 5,940,474, published August 17, 1999 in view of Loison et al., United States Patent number 7,251,725, filed August 1, 2002.

As per claim 1, Britt discloses *network equipment for providing a connection to a network, said network comprising at least one software server* (Britt, col. 2, lines 23-30), said network equipment comprising: *a memory for storing software* (Britt, col. 2, lines 27-30, where the flash is the memory for storing software); *means for providing a connection to said network* (Britt, col. 4, lines 17-25); *and means for monitoring a start up of the network equipment to detect a software start up failure* (Britt, col. 8, lines 1-13), *and for generating a software start up failure signal in response to detecting said software start up failure* (Britt, col. 8, lines 14-32, where the signal is the initiation of the error download routine), *said software start up failure signal being sent on the network, for reception by said at least one software server* (Britt, col. 9, lines 47-52, where the default server acts as the software server), *said software start up failure signal comprising information specifying at least one of: (i) a nature of said software start up failure, an identification of replacement software to be downloaded, and an identification of a version of the software currently stored in the memory (ii) said nature of said software start up*

failure, and said identification of replacement software to be downloaded; and (iii) said nature of said software start up failure, and said identification of said version of the software currently stored in the memory (Britt, col. 8, lines 5-12, where the startup fails to complete based upon either a upgrade or error, where the indication of which file, default or upgrade, to download is an identification of the nature of the startup failure; Britt, col. 9, lines 50-51, where the client requests a default file, which indicates the replacement software to be downloaded; and Britt, col. 9, lines 52-55, where the client system indicates which version of software is currently running).

Britt fails to disclose the network communication being on a local network with the start up failure signal being only sent on a local network.

Loison discloses a local communication network in which start up failure signals are broadcast to servers of the local network (Loison, col. 1, lines 17-20, where the start up failure is detected in col. 1, lines 31-38, where the DISCOVER signal is the failure signal being broadcast on the local network to allow for boot recovery).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the teachings of Britt in the environment of Loison.

This would have been obvious because Britt discloses a desire to client and server system (Britt, figure 1). Loison discloses a similar client and server system at the local level (Loison, col. 1, lines 40-43). It would have been obvious to implement this recovery system at the local level to allow for the same degree of boot recoverability without the need to know the internet address of the remote server, as in Britt, thus allowing for greater flexibility in the implementation of the invention of Britt.

As per claim 3, Britt and Loison further disclose *the network equipment according to claim 1, wherein the software comprises at least one of: a boot program; configuration data; and firmware* (Britt, col. 8, lines 1-13, where the error checking program is a boot program).

As per claim 4, Britt and Loison further disclose *the network equipment according to claim 3, wherein the software comprises said firmware, and the monitoring means comprises: means for checking a current firmware verification pattern* (Britt, col. 8, lines 14-32, where the checksum is a verification pattern) *and means for generating said software start up failure signal when said current firmware verification pattern is not valid* (Britt, col. 8, lines 14-32, where the failure signal is the error download initiation signal that results from a bad checksum).

As per claim 5, Britt and Loison further disclose *the network equipment according to claim 1, wherein the monitoring means comprises: means for calculating the a checksum of the software currently stored in said memory; means for comparing this said calculated checksum to a previously stored checksum; and means for generating the software start up failure signal when this said calculated checksum is not identical to the previously stored checksum* (Britt, col. 8, lines 14-32, where the checksum operation is described).

As per claim 6, Britt and Loison further disclose *the network equipment according to claim 3, wherein, the monitoring means comprises: means for checking the for a presence of the firmware in the memory; means for rebooting the network equipment if the firmware is not stored in the memory; and means for generating said software start up failure signal if the firmware is not stored in the memory* (Britt, col. 2, lines 26-30, where the flash memory is the firmware memory, col. 7, lines 20-56, where the software is shown to be stored in the flash, and

col. 8, lines 1-32, where the checking of the software would include detecting an absence of proper software, and the checking includes rebooting and generating the failure signal in reaction to a lack of proper software).

As per claim 7, Britt and Loison further disclose *the network equipment according to claim 1, wherein the monitoring means comprises: means for monitoring downloading of replacement software in the memory; and means for rebooting the network equipment and for generating said software start up failure signal when if a problem is detected during this said downloading* (Britt, col. 8, lines 1-32, where the software is checked, which would include checking any replacement software that was downloading, and where the system is reboot and a failure signal triggered if the system detects an error in the software).

As per claim 8, Britt and Loison further disclose *the network equipment according to claim 3, wherein the software comprises said firmware, and the network equipment comprises: means for writing a replacement firmware verification pattern corresponding to the replacement firmware downloaded in the memory if said replacement firmware is properly recorded in this said memory* (Britt, col. 8, lines 14-32, where a replacement checksum would have to be generated for any new downloaded software to allow the proper testing operation).

As per claim 9, Britt and Loison further disclose *the network equipment according to claim 1, wherein the monitoring means comprises: means for monitoring a process of loading said software in said memory; and means for rebooting the network equipment and for generating said software start up failure signal if a problem is detected during said loading* (Britt, col. 8, lines 1-32, where the checksum checks the loading of the software in memory,

where any error will result in the reset of the system and the generation of a failure signal to trigger an error download routine).

As per claim 11, Britt and Loison further disclose *the network equipment according to claim 1, further comprising user activation means connected to the monitoring means for enabling a user to manually request a download of replacement software* (Britt, col. 8, lines 45-50, where the user is prompted to request download).

As per claim 13, Britt and Loison further disclose *the network equipment according to claim 1, wherein the monitoring means comprises: means for checking a setting of a failure flag; and means for generating the software start up failure signal and for transmitting it the software start up signal on the local network in response to detecting that the failure flag is set* (Britt, col. 8, lines 14-32, where failure flag is the indication of the checksum result and the start up failure signal is transmitted to initiate the error download routine in response to this indication).

As per claim 14, Britt and Loison further disclose *the network equipment according to claim 1, wherein an indication of the nature of the software start up failure comprises a series of status flags* (Britt, col. 8, lines 14-27, where the checksum result indicators are the flags, which are generated for each section of data to show which portion is corrupt and which is valid).

As per claim 16, this claim is merely a method for executing the steps of the apparatus of claim 1, as such it is rejected under the same grounds of Britt and Loison as those applied to claim 1 above.

As per claim 17, Britt and Loison further disclose *the method according to claim 16, wherein the software start up failure signal comprises a request to the at least one software*



*server for the download of the replacement software in the memory (Britt, col. 8, lines 14-32, where the error download routine downloads replacement software).*

As per claim 18, Britt and Loison further disclose *the method according to claim 16, wherein the software start up failure signal comprises an identification of the software start up failure for analysis by the at least one software server (Britt, col. 8, lines 14-32, where the checksum provides the indication of the failure).*

As per claim 19, Britt discloses *network equipment for providing a connection to a network, said network comprising at least one software server (Britt, col. 2, lines 23-30), said network equipment comprising: a memory for storing software (Britt, col. 2, lines 27-30, where the flash is the memory for storing software); means for providing a connection to said network (Britt, col. 4, lines 17-25); and means for monitoring a start up of the network equipment to detect a software start up failure (Britt, col. 8, lines 1-13), and for generating a software start up failure signal in response to detecting said software start up failure (Britt, col. 8, lines 14-32, where the signal is the initiation of the error download routine), said software start up failure signal being sent on the network, for reception by said at least one software server (Britt, col. 9, lines 47-52, where the default server acts as the software server), said software start up failure signal comprising information specifying a nature of said software start up failure (Britt, col. 8, lines 5-12, where the startup fails to complete based upon either a upgrade or error, where the indication of which file, default or upgrade, to download is an identification of the nature of the startup failure).*

Britt fails to disclose the network communication being on a local network with the start up failure signal being only sent on a local network.

Loison discloses a local communication network in which start up failure signals are broadcast to servers of the local network (Loison, col. 1, lines 17-20, where the start up failure is detected in col. 1, lines 31-38, where the DISCOVER signal is the failure signal being broadcast on the local network to allow for boot recovery).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the teachings of Britt in the environment of Loison.

This would have been obvious because Britt discloses a desire to client and server system (Britt, figure 1). Loison discloses a similar client and server system at the local level (Loison, col. 1, lines 40-43). It would have been obvious to implement this recovery system at the local level to allow for the same degree of boot recoverability without the need to know the internet address of the remote server, as in Britt, thus allowing for greater flexibility in the implementation of the invention of Britt.

As per claim 20, Britt and Loison further disclose *the network equipment according to claim 1, wherein the software comprises at least one of: a boot program; configuration data; and firmware* (Britt, col. 8, lines 1-13, where the error checking program is a boot program).

As per claim 21, Britt and Loison further disclose *the network equipment according to claim 3, wherein the software comprises said firmware, and the monitoring means comprises: means for checking a current firmware verification pattern* (Britt, col. 8, lines 14-32, where the checksum is a verification pattern) *and means for generating said software start up failure signal*

*when said current firmware verification pattern is not valid* (Britt, col. 8, lines 14-32, where the failure signal is the error download initiation signal that results from a bad checksum).

As per claim 22, Britt and Loison further disclose *the network equipment according to claim 1, wherein the monitoring means comprises: means for calculating the a checksum of the software currently stored in said memory; means for comparing this said calculated checksum to a previously stored checksum; and means for generating the software start up failure signal when this said calculated checksum is not identical to the previously stored checksum* (Britt, col. 8, lines 14-32, where the checksum operation is described).

**Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Britt and Loison in further view of Marsh, United States Patent Application Publication number 2002/0095619, filed January 17, 2001.**

As per claim 10, Britt and Loison disclose the network equipment according to claim 1, but fail to disclose the additional limitations involving a timer.

Marsh discloses a timer to determine a time limit for software start up; means for launching the software start up; and means for generating said software start up failure signal if the software start up is not completed before an end of the time limit (Marsh, ¶43).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the timer of Marsh in the invention of Britt and Loison.

This would have been obvious because Britt and Loison disclose a desire to determine proper initialization of a system (Britt, col. 8, lines 1-12). Britt and Loison ensure this

determination through use a checksum, but would benefit from the timer of Marsh to further this determination by including a timer that would ensure that even the checksum is properly completed.

As per claim 12, Britt and Loison disclose the network equipment according to claim 1, but fail to disclose an alarm connected to monitoring means.

Marsh discloses an alarm connected to the monitoring means for communicating the software start up failure to the user (Marsh, ¶44).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the notification alarm of Marsh in the invention of Britt and Loison.

This would have been obvious because both the invention of Britt and Loison and that of Marsh show the importance of running a checksum operation to ensure proper operation. Marsh further shows that the user often needs to know the status of operation. Thus it would have been obvious to include the notification of Marsh to allow for a more informed user in the system of Britt and Loison.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA A. LOHN whose telephone number is (571)272-3661. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua A Lohn/  
Primary Examiner, Art Unit 2114